# The relationship between caregiver burden and the characteristics of the helping relationship

## **Introduction:**

The management of a patient with Alzheimer's disease is heavy. It is often associated with the exhaustion of caregivers.

### Aim :

- > To assess the level of burden in caregivers of patients with Alzheimer's disease and to determine their relationship to the characteristics of the helping relationship. **Patients and methods:**
- A cross-sectional, descriptive and analytical study.
- The psychiatric department of the Regional Hospital of Gabes.
- All caregivers who accompanied their relatives with Alzheimer's disease to their appointments
- From 1<sup>st</sup> November 2016 to 15 January 2017
- A questionnaire containing the patient's and the caregiver's sociodemographic and medical data, as well as the characteristics of the care relationship.
- The Zarit Burden Inventory (ZBI) was used to assess the level of burden on the caregiver.

### **Results:**

 $\therefore$  Number of caregiver = 50

TABLE 1: Characteristics of the study population			
Characteristics	Percentage / Mean		
	74%		
)	46		
the patient	68%		
on of the help relationship (years)	$4\pm 2$		
the patient (hours / day)	6		
Burden Inventory score	43		
perceived to be high	48%		

<b>Characteristics</b>	Percentage / Mean
Female gender	74%
Mean age (years)	46
Cohabiting with the patient	68%
The mean duration of the help relationship (years )	$4\pm 2$
Time spent with the patient (hours / day)	6
The mean Zarit Burden Inventory score	43
The burden was perceived to be high	48%

TABLE 2: Correlations of characteristics of caregivers with level of burden

	Low burden (N=26) Mean/Number (%)	High burden (N=24) Mean/Number (%)	Ρ	
Main caregiver				
No	13 (50)	4 (17)	0.01	
Yes	13 (50)	20 (83)		
Cohabiting with patient				
Yes	14 (53)	20 (83)	0.02	
No	12 (47)	4 (17)		
Number of years of assistance	4±2	4±2	NS	
Duration of assistance per day			NS	
(hour/day)	5±3	7±3		

\* A high caregiver burden was significantly associated with being the main caregiver of the patient (50% vs. 83%, p = 0.01) and cohabiting with him (53% vs. 83%, p = 0.02). We did not note any statistical correlations between the rest of the variables of the aid relationship and the level of burden.

### Discussion

The average age of caregivers in our study was 46 years. This average age remains lower than those described in the literature compared to 77.8 years in the Pixel study (a French cohort of 1410 caregiver-helper pairs belonging to the France Alzheimer association, of which 1069 were diagnosed with Alzheimer's disease)[1] and 64 years in the REAL FR study[2].

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The preponderance of descendants among the caregivers in our study nevertheless explains the relatively younger age than that found in the French studies. Preferential care by descendants is underpinned by the death of the spouse but also and above all by a cultural base. Indeed, traditionally in our society, care for elderly or frail parents is provided by adult children, mainly the eldest one. The large predominance of female carers in our work (74% of our sample) is in line with the data in the literature. According to studies conducted in the USA, Brazil<sup>[3]</sup> and Argentina<sup>[4]</sup>, there was a preponderance of women. It was of lesser importance elsewhere in Korea[5], Australia<sup>[6]</sup>, Taiwan<sup>[7]</sup>, Malaysia<sup>[8]</sup> and India<sup>[9]</sup>.

Thus, the responsibility for caring for dependent elderly people would generally rest with women. A rule that would be based on a series of arguments, including the role played by women in society. This role as a caregiver would generally be a simple extension of her activity as a wife and mother.

The average score on the ZBI scale was 43. A severe burden score was found in 48% of caregivers of patients with Alzheimer's disease. Indeed, Ben Thabet et al (2011), in a study conducted in Sfax on 65 caregivers of patients with dementia of all etiologies, using ZBI as the assessment scale, found that 52% of caregivers had a severe burden score 10.

\* By comparing our results with those in the literature on dementia assistance, it main French study, Real Fr, the average score on the ZBI scale was 22.7[2]. This significant correlation between burden and behavioural and psychological

appears that our rates are higher than those described in the literature(European[2], American (Brazil[3], Argentina[4], Canada[11] and Asian[12] teams). Indeed, in the symptoms of dementia has been described in all studies that looked for risk factors for burden[4,6] and particularly the REAL FR study[2]. Bedard and al, in investigating factors explaining the difference in burden levels, significantly imputed the frequency of behavioural disorders and their impact on the feeling of burden[13]. Mayomoto Y and al, identified the behavioural and psychological symptoms of the patient's dementia as the most important predictor of the caregiver burden[14]. For Allegri and al, hallucinations, anxiety, aberrant motor behaviour, sleep disorders, delirium, and impaired appetite were, among the behavioural and psychological symptoms of dementia, the most predictive of a significant burden [4].  $\bullet$  On the other hand, the low levels of burden observed in European studies [12], America<sup>[15]</sup> and Asia<sup>[5]</sup>, could be largely explained by the care policy implemented in these countries. Indeed, multidisciplinary management of the patient is initiated as soon as the diagnosis of dementia is announced. Caregivers thus benefit from both financial and in-kind assistance since they can be assisted in their role by formal or even domestic professional assistance. In addition, they offer the possibility of institutionalizing the patient or integrating him/her into a geriatric day centre [16].

**Conclusion:** 

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The level of burden among caregivers of patient with Alzheimer's disease is high. This rate can be reduced by sharing the care of the sick person by all members of the family.

References

